

REMARKS

I. Introduction

In response to the Office Action dated July 5, 2006, Applicant has amended claim 1 and added new claim 30. No new matter has been entered.

For reasons set forth below, Applicant respectfully submits that all pending claims are patentable over the cited prior art references. Also, as the claimed apparatus is allowable for the following reasons, Applicant respectfully requests that the rejoinder of the withdrawn method claims, as these non-elected claims are directed to manufacturing the claimed apparatus.

II. The Rejection Of Claims 1-2, 5, 7-8 and 15 Under 35 U.S.C. § 102

Claims 1-2, 5, 7-8 and 15 are rejected under 35 U.S.C. § 102(e) as being anticipated by USP No. 6,433,487 to Yamazaki. Applicant respectfully traverses this rejection for at least the following reasons.

Claim 1 recites in part a second array of control transistors, wherein the control transistors include a semiconductor material and wherein the semiconductor material includes boron nitride.

In the statement of rejection, citing col. 5, line 12 to col. 6, line 32 of Yamazaki, the Examiner asserts that the thin film transistors (TFTs) 202 of Yamazaki include a boron nitride semiconductor material.

Yamazaki provides a passivation film 41 whose compound includes nitride of boron typified by boron nitride (6:23-24). This passivation film 41 is disposed over the TFTs 202. However, the passivation film 41 of Yamazaki does not provide the claimed control transistors that include a semiconductor material that includes boron nitride. First, in Yamazaki, the passivation film 41 is external and separate from the TFTs 202 and functions to protect the TFTs 202 against heat (6:6-14). Second, the passivation film 41 of Yamazaki is an insulating film, and is not a semiconductor material (or a control transistor that includes a semiconductor material). If the passivation film 41 were conductive (e.g., semiconductive), then the source/drain wirings 22/23/36/37 would be short circuited, and Yamazaki's TFTs 202 would be inoperable. In

contrast, the claimed control transistors include a semiconductor material that includes boron nitride. can be, for example, electrically conductive.

Accordingly, as anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference, *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983), and at a minimum, Yamazaki fails to disclose or suggest the foregoing claim elements, Applicant respectfully submits that Yamazaki does not anticipate claim 1 or any of the claims dependent thereon.

III. The Rejection Of Claims 1, 4-5, 7-8 and 15-16 Under 35 U.S.C. § 103

Claims 1, 4-5, 7-8 and 15-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over USP No. 5,989,752 to Chiu in view of USP No. 6,433,487 to Yamazaki. Applicant respectfully traverses this rejection for at least the following reasons.

A. Neither Chiu nor Yamazaki Disclose Or Suggest Control Transistors Having A Semiconductor Material That Includes Boron Nitride

In the statement of rejection, the Examiner admits that Chiu does not disclose control transistors having a semiconductor material that includes boron nitride, and relies upon Yamazaki to cure these deficiencies (page 4 item 6 of Office Action).

However, as discussed *supra*, the TFTs 202 of Yamazaki do not include a semiconductor material that includes boron nitride. Rather, in Yamazaki, boron nitride materials are present in a separate and distinct passivation film 41, which is positioned over the TFTs 202 to protect the TFTs 202 against heat (6:6-14). Also, the passivation film 41 of Yamazaki is an insulating film, and is not a semiconductor material.

Therefore, Applicant respectfully submits that claim 1 is allowable over the cited references. Claims 4-5, 7-8 and 15-16 depend on claim 1, and are submitted to be allowable by virtue of dependency.

B. Chiu And Yamazaki Do Not Provide The Requisite Motivation

The Examiner asserts the following purported motivation:

"[I]t would have been obvious ... to modify Chiu's display device ... [to include] boron nitride semiconductor material as taught by Yamazaki for effectively preventing the heat degrading of EL and TFT layers" (page 5, lines 105 of Office Action).

As a preliminary matter, Applicant respectfully submits that the Examiner has mischaracterized Chiu. Chiu discloses an invention pertinent to a reconfigurable photolithographic mask used in the formation of erasable pixel patterns. For example, the reconfigurable photolithographic mask is connected to addressing and driving circuitry formed at the periphery of the mask, which receives and transforms layout data from a computer-aided design (CAD) system into a pattern on the reconfigurable mask (7:12-17). However, the reconfigurable photolithographic mask of Chiu is not a display device. Rather, the reconfigurable photolithographic mask is used in forming an image on a substrate, where the image corresponds to the patterns on the reconfigurable photolithographic mask (1:19-31). Applicant therefore submits that the reconfigurable photolithographic mask of Chiu and the electroluminescent (EL) display device described in Yamazaki are directed to different aims and have different functions, and are thereby non-analogous.

Additionally, Applicant submits that the alleged motivation is not credible. Particularly, Chiu is not directed to an EL display device, and does not teach an EL layer. Therefore, the motivation to modify Chiu based on Yamazaki's teachings so as to prevent "heat degrading of EL and TFT layers" is flawed, and is not applicable to Chiu.

Accordingly, Applicant respectfully submits that the purported motivation is based solely on improper hindsight reasoning, whereby the Examiner selected bits and pieces of the claimed invention from plural references and used only Applicant's specification as a guide to reconstruct the claimed invention. Therefore, the proposed combination fails to establish *prima facie* obviousness of claim 1.

For at least these reasons, Applicant respectfully submits that claim 1, as well as claims 4-5, 7-8 and 15-16, which depend from claim 1, are in condition for allowance.

IV. The Rejection Of Claims 1-3 and 9-11 Under 35 U.S.C. § 103

Claims 1-3 and 9-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over USP No. 6,246,179 to Yamada in view of USP No. 5,989,752 to Yamazaki. Applicant respectfully traverses this rejection for at least the following reasons.

In the statement of rejection, the Examiner admits that Yamada does not disclose materials of the control transistors 30, and relies upon Yamazaki to cure these deficiencies (page 4 item 6 of Office Action).

However, as discussed *supra*, the TFTs 202 of Yamazaki do not include a semiconductor material that includes boron nitride. Rather, in Yamazaki, boron nitride materials are present in a separate and distinct passivation film 41, which is positioned over the TFTs 202 to protect the TFTs 202 against heat (6:6-14).

Therefore, Applicant respectfully submits that claim 1, as well as claims 2-3 and 9-11, which depend from claim 1, are in condition for allowance.

V. **Conclusion**

By responding in the foregoing remarks only to particular positions taken by the Examiner, the Applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, Applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

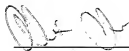
For all of the reasons set forth above, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. The three-month extension of time fee in the amount of \$1,020.00 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 1/3/07



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